Inline Cold Trap Unit

NEW PRODUCT

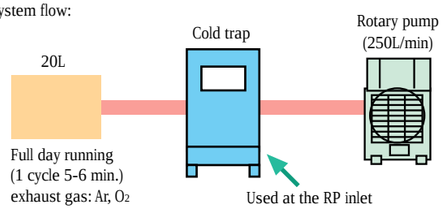
Solution Example

Plasma Asher Unit

Existing problem:

- By oil deterioration the drainage capacity of Rotary pump is down
  Cause: probably due to contamination with water or with something else
- Every second day, oil must be replaced
- Every 2 to 3 months O/H of the Rotary pump is necessary

System flow:



Confirmed Facts

- 100cc/week water were trapped.
- No problem after one month continuous operation.
  — Currently using the unit with 1/month oil change.

Summary:

- The deterioration of RP oil due to water contamination is under control
- Extended life time of RP exhaust function
- Reducing the frequency of oil replacement
- Extension of the life span of the RP

Features

- Offers wide variety of cooling application in Vacuum. The unit features low temp. cooling from -20˚C to -100˚C.
- Customized design or fitting to existing process line feasible.
- Multiple units installation greatly enhances the cooling capacity.
- Vacuum flange with thermo couple equipped. Built-in compressor also contributes to minimal unit size.
- Multiple responding program controls variety of optional application units.

Application

- Enforced cooling capacity in vacuum
- Fit for use with low temperature test equipment
- Recovery of gas and solvents
- Water trap for analytical instruments
- Prevent oil reflux of rotary pump
- Prevent oil reflux into vacuum chamber
- Less exhaust time
- Less frequency of pump overhaul

Application Examples

- Asher unit (pump protecting, running time up)
- Sputtering unit (shorter rough pumping, better yield)
- Vacuum oven (running time up, pump protecting)
- Rough pumping system like a cryo-pump
- Leak test system (more productivity, less workload)

Specifications

Product name		Inline Cold Trap Unit
Input voltage		DC24V
Cooling temperature		-20~-100˚C
Cooling capacity		60W at -23.3˚C (endothermic temp.)
		25W at -80˚C (endothermic temp.)
Ambient temp.		25˚C
Decreasing time (in vacuum)		4 minute to -60˚C, 5minute to -80˚C
Exhaust heating temp.		45˚C
Connecting flange		VG80 (JIS)
Usage environment		0~40˚C, 0~90% & less (non condensing)
External control function	input	ON/OFF signal
		Output control signal 1 (0~5V input voltage)
		Output control signal 2 (4~20mA current input)
	output	Exhaust heating abnormity
		Exhaust heating alarm
		Output control signal abnormity
Material	cover	resin
	flange	SUS304
	cooling part	Cu+Ni plating
Weight		6kg
Overall dimensions (mm)		160W*203L*360H

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Low Temperature Circulator